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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/834,988	04/13/2001	Robert James Toth	N-5833	3541

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EXAMINER	
FAROOQ, MOHAMMAD O	
ART UNIT	**PAPER NUMBER**
2181	

DATE MAILED: 01/30/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/834,988	TOTH ET AL.	
	Examiner	Art Unit	
	Mohammad O. Farooq	2181	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *12 August 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *11-20 and 25-31* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *11-16,18-20,25 and 26* is/are rejected.

7)☒ Claim(s) *17 and 27-31* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *12 August 2005* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Drawings

1. The drawings were received on August 12, 2005. These drawings are accepted by the examiner.

Allowable Subject Matter

2. The indicated allowability of claims 11-15, 25 and 26 is withdrawn in view of the newly discovered reference(s). Rejections based on the newly cited reference(s) follow.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 12-16, 18-20 recites the limitation "the bank controller" in the preamble. There is insufficient antecedent basis for this limitation in these claims.

4. Claim 25 recites the limitation "the system", "the system module connectors" and "the system modules" in the limitations a, b, c and d . There is insufficient antecedent basis for these limitations in this claim.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Papa et al. U.S. Pat. No. 6,324,608 B1 in view of Lee et al. U.S. Pat. No. 5,495,516.

6. As to claim 11, Papa et al. teach a modular system, comprising:

a system chassis having a system backplane for receiving and connecting one or more system modules to network (col. 5, lines 1-34);

one or more system modules removably connected to the system chassis for connecting one or more devices to network (col. 5, lines 10-20);

wherein the one or more system modules include dumb access modules, smart access modules, or a combination of both dumb and smart access modules (see fig. 2; col. 4, lines 8-65).

However, Papa et al. do not teach T1; voice and data and wherein the one or more system modules include any combination of one or more of the following access modules: an FXS/FXO access module, wherein the FXS/FXO access module includes an automatic gain control circuit; a fractional T1 port; a Nx56/64 access module; a U-BRITE access module; or a DDS access module. Lee et al. teach T1; voice and data and wherein the one or more system modules include any combination of one or more of the following access modules; and FXS/FXO access module, wherein the FXS/FXO access module includes an automatic gain control circuit; a fractional T1 port (col. 3, lines 7-32); and Nx56/64 access module; a U-BRITE access module; of a DDS access module. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to combine the teachings of Papa et al. and Lee et al. because that would provide automatic remote mechanism for establishing a diagnostic channel between a network managed master DSU and remote fractional T1 or E1 DSUs (col. 1, lines 53-57).

7. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Papa et al. U.S. Pat. No. 6,324,608 B1 in view of Lee et al. U.S. Pat. No. 5,495,516 further in view of Fletcher et al. U.S. Pat. No. 6,363,477 B1.

8. As to claim 12, neither Papa et al. nor Lee et al. teach bank controller unit maintains performance information regarding the T1 network. Fletcher et al. teach bank controller (network manager; col. 1, lines 48-53) unit maintains performance information regarding T1 network (col. 1, lines 48-53; col. 18, lines 7-20). Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify the combination of Papa et al. and Lee et al. with Fletcher et al. because that would provide the network manager to recognize situations indicating that either a problem is present or impending (col. 1, lines 48-53).

9. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Papa et al. U.S. Pat. No. 6,324,608 B1 in view of Lee et al. U.S. Pat. No. 5,495,516 further in view of Fletcher et al. U.S. Pat. No. 6,363,477 B1 and Borneman et al. U.S. Pat. No. 6,553,041 B1.

10. As to claim 13, neither Papa et al. nor Lee et al. nor Fletcher et al. teach superframe, extended superframe, TR-08 with alarm. However, Borneman et al. teach superframe (due to the fact 24 DS1 or extended superframe is explicitly stated; therefore, it would be obvious to utilize ½j of extended superframe or 12 DS1 for superframe), extended superframe and TR-08 with alarm (col. 3, lines 10-17; col. 8, lines 50-64; col. 6, lines 41-50). Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify the combination of Papa et al. and Lee et al. and Fletcher et al. with Borneman et al. because that would provide call supervision or management for use in in-band signaling (col. 1, lines 10-16).

11. Claims 14 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Papa et al. U.S. Pat. No. 6,324,608 B1 in view of Lee et al. U.S. Pat. No. 5,495,516 further in view of Fletcher et al. U.S. Pat. No. 6,363,477 B1 and Borneman et al. U.S. Pat. No 6,553,041 B1 and Bennet et al. U.S. Pat. No, 6,775,707.

12. As to claim 14, Papa et al. do not teach network and fractional T1 control.

However, Lee et al. teach network and fractional T1 control (col. 3, lines 7-32). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings Papa et al. and Lee et al. because that would provide automatic remote mechanism for establishing a diagnostic channel between a network managed master DSU and remote fractional T1 or E1 DSUs (col. 1, lines 53-57).

Netither Papa et al. nor Lee et al. nor Fletcher et al. nor Borneman et al. teach access module control, alarm control, user interface control, and backplane control. Bennet et al. teach access module control, alarm control, user interface control, and backplane control. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify the combination of Papa et al. and Lee et al. and Fletcher et al. and Borneman et al. with Bennet et al. because that would provide increase data throughput in communication links that have low bandwidth and/or a transmission time delay (col. 1, lines 7-12).

13. As to claim 15, Papa et al. teach system, wherein the bank controller unit includes field programmable logic array for providing clock generation, chip select and backplane interface functions (inherent since plurality of modules having processors on them and having backplane; col. 4, lines 8- 43; col. 5, lines 1-58).

14. Claims 25 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Papa et al. U.S. Pat. No. 6,324,608 B1 in view of Lee et al. U.S. Pat. No. 5,495,516 further in view of Bennett et al. U.S. Pat. 6,775,707.

15. As to claim 25, Papa et al. teach system comprising:

A system chassis having a bank of module slots, each slot adapted for receiving one of a plurality of removable system modules such that the system modules can be inserted in and removed from the module slots from a front portion of the chassis (col. 5, lines 1-34);

The system chassis further comprising a system comprising a system backplane adapted for electrically connecting to the system module connectors on a rear portion of the system modules (col. 5, lines 1-34);

The system modules including a plurality of access modules operable to provide a functional interface and different types of the customer premises communications devices, the access modules used in the system being selected by the customer to correspond to the types of customer premises communications devices to be connected to the network (since various types of interface modules; col. 5, lines 1-58);

A power service unit connected to the system for supplying power received from the network to the one or more system modules (plurality of power modules; col. 4, lines 8-18);

A bank controller unit (microcontrollers) connected to the system chassis for controlling the power service unit and the one or more system modules (col. 4, lines 8-43);

Wherein the one or more system modules include dumb access modules, smart access modules, or a combination of both dumb and smart access modules (see fig. 2, col. 4, lines 8-65);

Wherein bank controller unit (microcontrollers) provides network control (col. 4, lines 37-43) and access module control (col. 4, lines 37-43; col. 5, lines 1-35) and backplane control (inherent due to having backplane; col. 5, lines 45-57).

However, Papa et al. do not teach fractional T1 control. Lee et al. teach fractional T1 control (col. 3, lines 7-32). Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to combine Papa et al. and Lee et al. because that would provide provide automatic remote mechanism for establishing a diagnostic channel between a network managed master DSU and remote fractional T1 or E1 DSUs (col. 1, lines 53-57).

Neither Papa et al. nor Lee et al. teach alarm control and user interface control. Bennett et al. teach alarm control and user interface control (col. 18, lines 15-20, 44-48). Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify the combination of Papa et al. and Lee et al. with Bennett et al. because that would reduce redundant acknowledgement of alarm messages at the application level (col. 3, lines 1-8).

16. As to claim 26, Papa et al. teach system, wherein the bank controller unit includes field programmable logic array for providing clock generation, chip select and backplane interface functions (inherent since plurality of modules having processors on them and having backplane; col. 4, lines 8- 43; col. 5, lines 1-58).

Allowable Subject Matter

17. Claims 16-20 and 27-31 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

18. Applicant's arguments with respect to claims 11-20 and 25-31 have been considered but are moot in view of the new ground(s) of rejection.

19. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mohammad O. Farooq whose telephone number is (571) 272-4144. The examiner can normally be reached on 9:00am - 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Huynh can be reached on (571)-272-4147. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Mano Padmanabhan
1/18/06

Mohammad O. Farooq
January 18, 2006

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SUPERVISORY PATENT EXAMINER